

METHOD AND APPARATUS FOR A LOCALLY REGULATED CIRCUIT

ABSTRACT

According to one embodiment, a locally regulated circuit regulates current flows (I_{REG} and I_{VREG}) through the operation of a current mirror (334, 332, 326). The regulated current flows are used to self-generate a common mode voltage (V_{422}) at node (322) and to produce the required bias signals through input stage (302 and 308) and output stage (314 and 316) in response to data input signals (D and D-complement). Cancellation of common mode voltage variation is further enhanced by generating a supplemental current in response to an error signal generated by comparing a desired common mode voltage (V_{CM}) to the actual common mode voltage at node (322). The supplemental current conducted by either of loads (310 and 312) serves to regulate the common mode voltage at node (322).